

- 22.** The method of claim **19**,
wherein the chemical comprises a buffered oxide etcher
(BOE) chemical having a pH of about 6.5 to about 7.0
and/or an NH_4 chemical having a pH of about 10 to
about 12, and
wherein the cleaning the oxidized portion of the interfa-
cial conductive layer comprises removing byproducts.
- 23.** The method of claim **12**,
wherein forming the barrier layer comprises forming a
conductive adhesive layer on the etch stop layer, and
wherein the conductive adhesive layer is patterned by the
etching process for the forming of the upper electrode.

* * * * *